



DS 830 8-CHANNEL TABLETOP SPEAKER STATION



QUICK GUIDE January 2014

View this guide also for the use of the **DS 1630**, the **DS 2430** and the **DS 3230** tabletop speaker stations, which have the same controls and connectors as the DS 830, but with additional channels

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1.0 INTRODUCTION

The DS 830 tabletop speaker station has 8 channels, each having a Talk and a Listen button.

A set of wall mount strips is included in each DS 830 shipping carton. Using the DS 830 KIT, this speaker station can be mounted in a 19" rack, taking 3U of rack space.

The DS 830 electronics are powered by an external 48 V DC adaptor, to be connected to mains power (100 – 240 V AC, 50/60 Hz, 60 watts). The unit is automatically activated as soon as the digital intercom system is switched on.

Each channel is assigned to a user group as defined by the system administrator in the configuration software. Besides having communication via the user groups, the user may initiate PTP (Person to Person) communication (like a private telephone call) and send/receive Text Messages (SMS).

The DS 830 channel displays show the group names and a Listen Volume bar, the master display shows the assignments of the function buttons, the menu items and the text messages.

In the master section are 4 programmable function buttons, a Mic On button, a Solo button and a PTP button. The alpha-numerical keypad allows the user to enter ID numbers and user names. The Menu button in the keypad is used to enter the Menu and to exit the Menu.

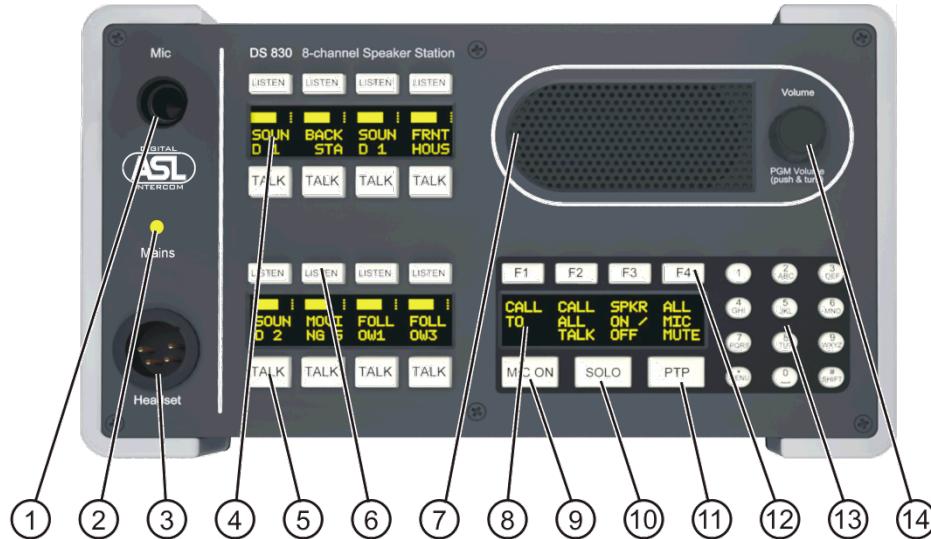
Connecting the DS 830 speaker station to an intercom line ('string'), one uses the 'Intercom In' connector. The 'Intercom Link Out' connector is used in case of a daisy chain wiring topology.

The separately to be ordered ASL electret gooseneck microphone is of the noise cancelling type. It has a LED ring, indicating that the microphone is active.

A headset may be connected via the XLR-4 connector on the DS 830 front panel. Headset and gooseneck microphone limiters prevent the mic signal path from clipping. A proprietary frequency correction provides high intelligibility.

The DS 830 BIN is the binaural version of this speaker station, equipped with an XLR-5 headset connector for 'left-center-right' use of a headset.

2.0 FRONT PANEL CONTROLS & CONNECTOR



1 GOOSENECK jack connector

This connector holds a gooseneck microphone which may be of the electret or dynamic type. The mic signal path for either mic type has to be adjusted by the user, via menu item #9 'GOOSENECK MIC TYPE' or by the system administrator in the configuration software.

2 MAINS LED indicator

This yellow LED is lit when the DS 830 receives power from a mains outlet, via the external 48 V DC adaptor.

3 HEADSET connector (XLR-4)

To connect a headset. The DS 830 accepts headsets with microphones of the dynamic or electret type. The mic signal path for either type has to be adjusted by the user, via menu item #7 'Headset Mic Type' or by the system administrator in the configuration software.

If a headset is plugged in, the gooseneck mic and the loudspeaker are automatically disabled. The speaker can be switched on again by pushing the SPKR ON/OFF Function Button.

By selecting the microphone type for the gooseneck mic or the headset mic, the mic input circuitry automatically gets a gain setting which suits either type. These settings may be adjusted with -4 dB to +20 dB, by the user via menu item #8 'Headset Mic Gain' and menu item #10 'Gooseneck Mic Gain' or by the system administrator in the configuration software

4 Channel Displays

These displays show for each channel the listen level, the group name and "audio detect".

5 TALK buttons

One for each channel, latching or momentary.

Latching:

If a TALK button is pushed shortly, the microphone signal is sent to the chosen channel and the TALK button is latching. If pushed again the Talk function switches off. The latching function can be disabled by the system administrator in the configuration software.

Momentary:

When keeping a TALK button pushed for at least 2 seconds, the microphone signal is sent to the chosen channel until the button is released.

When a TALK button is activated, it is lit green provided the MIC On button was activated.

If a TALK button is switched on but the MIC ON button isn't, the TALK button is lit yellow.

6 LISTEN buttons

These buttons enable the listen function of each channel. If switched on, the buttons are lit green. The listen level is shown as a volume bar in the channel display and is adjusted by keeping the equivalent listen button pushed and turning the Master Volume encoder.

7 LOUDSPEAKER

Through this loudspeaker the intercom and PTP communication is heard as well as the PGM signals and the Error, Ring, and Engaged tones.

8 Master Display

This display shows the functions of the function buttons, the menu functions (after entering the menu), the PTP functions (during PTP mode) and user ID number (during login procedure).

9 MIC ON button

If this button is pushed (latching or momentary), it is lit yellow if none of the TALK buttons are activated. If the MIC ON button is pushed and one or several TALK buttons are activated, the MIC ON button is lit green and the microphone signal is sent to the selected channels.

If TALK buttons are activated but the MIC ON is switched off, those TALK buttons are lit yellow, indicating no signal is sent to the selected channels.

10 SOLO button

This button activates the SOLO mode of the station: If a TALK button is pushed whilst the unit is in SOLO mode, the user talks and listens to the selected channel only. The TALK button is momentary only and the equivalent LISTEN button switches on automatically. All Talk and Listen functions of the remaining channels are disabled and the MIC ON button switches on automatically (if it was switched off before).

11 PTP button

This button is to initiate a PTP (Person to Person) call or 'taking' an incoming PTP call. It is also used in Text Messaging procedures.

12 FUNCTION buttons (F1, F2, F3, F4)

The user may assign a number of functions to these function buttons on his speaker station. By pushing the SHIFT button in the keypad, four other functions may be assigned to these buttons. Assigned functions are shown in the master display. To activate a function the corresponding function button is pushed. The various functions are listed in the ASL Digital User Manual.

13 Keypad

This alpha-numerical keypad is used to enter ID numbers and names. The MENU button is to enter (keep the button pushed for 2 seconds) or exit the Menu and to confirm the ID number when logging in. With the SHIFT button the unit can be put into Standby Mode (keep this button pushed for 4 seconds)

14 VOLUME knob (rotary encoder)

By turning this rotary encoder the volume of the intercom and PGM audio input signals are controlled, for both speaker and headset.

By pushing and turning the rotary encoder, the volume of the PGM signals (see #19) may be adjusted in the required balance with the intercom signals. In that case the rotary encoder is the MASTER volume control for the intercom and the PGM signals. However, the encoder may be programmed to adjust the Intercom and the PGM volume independently (see menu item #24)

The rotary encoder is also used:

- to adjust the listen level of a channel by keeping the LISTEN button of that channel pushed and turning the encoder.
- to scroll through the Menu and PTP items.
- to adjust the PTP listen level when being on a PTP call.

3.0 REAR PANEL CONNECTORS



15 POWER ADAPTOR entrance

To connect the external 48 V DC adaptor

16 GPIO connector

This D-connector holds 4 GP inputs and 4 GP outputs. To this connector also an IS 141 Beacon may be connected (see ASL Digital User Manual for the pin configuration of this connector)

17 INTERCOM IN connector

To connect the station to the CAT-5 or CAT-6 intercom line ("string").

18 INTERCOM LINK OUT connector

To daisy chain the intercom line to the user station.

19 PGM input

This XLR-3F connector accepts PGM signals (locally fed program audio signals) on balanced line level and are routed directly to the speaker and/or headset, not to the intercom channels

20 MIC DIRECT OUT connector

This XLR-3M connector outputs the microphone signal on balanced line level and is often used for '**Stage Announce**'. It is activated by pushing and holding the function button to which the 'Mic Direct Out' function has been assigned.

21 EXTERNAL SPKR connector

This 6.3 mm jack allows the connection of an external speaker. If connected, the internal speaker switches off automatically.

4.0 MISCELLANEOUS

External power adaptor:

Mains voltage : 100 - 240 V AC / 47 – 63 Hz

Output voltage: 48 V DC

Max. Output power: 48 Watts

MIC Input Circuitry:

A built-in limiter preserves the mic signal path from clipping. A proprietary frequency correction provides high intelligibility, which may be switched off, by the user via menu item #12 'Presence Filter' or by the system administrator.

Side Tone:

Side Tone is the level of ones own voice as heard in the headset cans. The Side Tone may be adjusted by the user via menu item #6 'Side Tone Headset' or by the system administrator.

Output amplifiers:

The bridged headset amplifiers are optimized for 200 ohm (2 headset cans parallel, each 400 ohm) and have a current limiter. Also the amplifier for the loudspeaker has such a limiter.

Speaker Attenuator :

When the gooseneck microphone is switched on, the loudspeaker is automatically attenuated. The degree of attenuation may be adjusted by the user via menu item #25 'Speaker Attenuator' or by the system administrator.

DS 830 Dimensions & Weight:

Width: 230 mm / Height: 87 mm

Depth: 132/155 mm (sloping)

Weight (including adaptor): 2.2 kg

See the ASL Digital User Manual for:

- Connecting an IS 141 Beacon
- Dashboard lighting & LED brightness
- Assigning functions to Function Buttons
- Changing group positions at the DS 830
- Connecting the DS 830 to the network
- Logging in & Stand-by Mode
- Auto Login
- PTP (person to person) operation
- Text Messaging (SMS)
- Menu operation & Menu items